

Translation

PATENT COOPERATION TREATY

PCT/EP2003/006923



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2002P15262WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/006923	International filing date (day/month/year) 30 June 2003 (30.06.2003)	Priority date (day/month/year) 10 July 2002 (10.07.2002)
International Patent Classification (IPC) or national classification and IPC B66C 13/56		
Applicant DEMAG CRANES & COMPONENTS GMBH		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>8</u> sheets, including this cover sheet. <input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of <u>6</u> sheets.
3. This report contains indications relating to the following items: I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 16 January 2003 (16.01.2003)	Date of completion of this report 01 June 2004 (01.06.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

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I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages 1-11, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages _____, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages 1-27, filed with the letter of 16 January 2004 (16.01.2004)
- ☒ the drawings:
 pages 1/9-9/9, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-27	YES
	Claims		NO
Inventive step (IS)	Claims	1-27	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-27	YES
	Claims		NO

2. Citations and explanations

1. Independent claim 1

1.1 PCT Article 33(2)

EP-A-0 592 795 (document D1) discloses a pendant control suspended by a control line from a unit which is to be controlled. The control line comprises electrical wires for transmitting control signals and a strain-relief element supported at the top of the unit to absorb weight forces and tensile forces.

The subject matter of claim 1 differs from the pendant control of D1 in that it is height-adjustable relative to the unit, and in that beyond the strain-relief element support as seen looking from the pendant control towards the unit a stowage system for the electrical wires is provided to receive and dispense a specified length of control line.

The features of claim 1 are not disclosed in their entirety either by D1 or by any of the documents cited in the international search report. The subject matter of claim 1 is therefore novel (PCT Article 33(2)).

1.2 PCT Article 33(3)

The problem addressed by the present invention can therefore

be seen as that of specifying a pendant control in which the length of the control line is easily adjusted.

The pendant control disclosed in D1 is not height-adjustable relative to the unit. A height-adjustable pendant control with a control line for providing strain relief and accommodating electrical wires, and with an electrical wire stowage system beyond the strain-relief element support, is not suggested by the available prior art.

The subject matter of claim 1 therefore involves an inventive step (PCT Article 33(3)).

2. Independent claim 14

2.1 PCT Article 33(2)

Document D1 discloses a control device suspended from a unit which is to be controlled. The control line comprises electrical wires for transmitting control signals and a strain-relief element supported at the top of the unit to absorb weight forces and tensile forces.

The subject matter of claim 14 differs from the pendant control of D1 in that between the pendant control and the unit a stowage system for the electrical wires is provided to receive and dispense a specified length of control line. To form the stowage system, the steel strain-relief cable and the electrical wires lead downwards from the unit, then back up via a first return element and back down via another return element to the pendant control, to which they are connected, the steel strain-relief cable and electrical wires being held together at the lower return point by means of a releasable clip.

The features of claim 14 are not disclosed in their entirety either by D1 or by any of the documents cited in the international search report. The subject matter of claim 14 is therefore novel (PCT Article 33(2)).

2.2 PCT Article 33(3)

The problem addressed by the present invention can therefore be seen as that of specifying a pendant control in which the length of the control line is easily adjusted.

The pendant control disclosed in D1 is not height-adjustable relative to the unit. FR-A-2 441 575 (document D2) describes a pendant control with a stowage system between the unit and the pendant control, but there are no return points and no releasable clip.

The subject matter of claim 14 therefore involves an inventive step (PCT Article 33(3)).

3. Independent claim 193.1 PCT Article 33(2)

Document D1 discloses a control device suspended from a unit which is to be controlled. The control line comprises electrical wires for transmitting control signals and a strain-relief element supported at the top of the unit to absorb weight forces and tensile forces. The steel strain-relief cable and the electrical wires are in the form of a single cable.

The subject matter of claim 19 differs from that of D1 in that the combined cable is detachably secured to a support element associated with the unit, the support element having two adjacent openings with an intermediate crossbar element around which the cable that runs through the two openings is self-lockingly guided.

The features of claim 19 are not disclosed in their entirety either by D1 or by any of the documents cited in the international search report. The subject matter of claim 19 is therefore novel (PCT Article 33(2)).

3.2 PCT Article 33(3)

The problem addressed by the present invention can therefore be seen as that of specifying a pendant control in which the length of the control line is easily adjusted.

The pendant control disclosed in D1 is not height-adjustable relative to the unit, and the combined cable is not detachably secured to the unit. The available prior art does not suggest a cable support element in a pendant control with adjacent openings and an intermediate crossbar element.

The subject matter of claim 19 therefore involves an inventive step (PCT Article 33(3)).

4. Independent claim 214.1 PCT Article 33(2)

Document D1 discloses a control device suspended from a unit which is to be controlled. The control line comprises electrical wires for transmitting control signals and a strain-relief element supported at the top of the unit to absorb weight forces and tensile forces.

The subject matter of claim 21 differs from the pendant control of D1 in that between the pendant control and the unit a stowage system for the electrical wires is provided to receive and dispense a specified length of control line. To form the stowage system, the electrical wires are routed inside a substantially vertical tube which is secured to the unit and has a telescopically extendable inner tube to which the pendant control is secured. Both tubes are flexible and are made of plastic.

The features of claim 21 are not disclosed in their entirety either by D1 or by any of the documents cited in the international search report. The subject matter of claim 21 is therefore novel (PCT Article 33(2)).

4.2 PCT Article 33(3)

The problem addressed by the present invention can therefore be seen as that of specifying a pendant control in which the length of the control line is easily adjusted.

The pendant control disclosed in D1 is not height-adjustable relative to the unit. DE 10 85 310 B (document D3) discloses a pendant control with telescopic tubes 8 and 9, but the tubes are not flexible and are not made of plastic.

The subject matter of claim 21 therefore involves an inventive step (PCT Article 33(3)).

5. Independent claim 265.1 PCT Article 33(2)

Document D1 discloses a control device suspended from a unit which is to be controlled. The control line comprises electrical wires for transmitting control signals and a strain-relief element supported at the top of the unit to absorb weight forces and tensile forces.

The subject matter of claim 26 differs from that of D1 in that the strain-relief cable and the electrical wires are in the form of a single flat cable, and in that between the pendant control and the unit a stowage system for the electrical wires is provided to receive and dispense a specified length of control line, the stowage system being formed by winding the cable around a support element which acts as a winding frame.

The features of claim 26 are not disclosed in their entirety either by D1 or by any of the documents cited in the international search report. The subject matter of claim 26 is therefore novel (PCT Article 33(2)).

5.2 PCT Article 33(3)

The problem addressed by the present invention can

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therefore be seen as that of specifying a pendant control in which the length of the control line is easily adjusted.

The pendant control disclosed in D1 is not height-adjustable relative to the unit. DE 25 35 038 A (document D4) describes a flat cable with electrical wires but no strain-relief element.

The subject matter of claim 26 therefore involves an inventive step (PCT Article 33(3)).

6. Dependent claims 2 to 13, 15 to 18, 20, 22 to 25 and 27

Claims 2 to 13, 15 to 18, 20, 22 to 25 and 27 are dependent on claims 1, 14, 19, 21 and 26 respectively, and therefore also meet the PCT requirements in respect of novelty and inventive step (PCT Article 33(2) and (3)).